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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

CLINICAL OBSERVATIONS ON HYDRATE OF CHLORAL.

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As hydrate of chloral seems particularly to attract the attention of the profession at this moment, and as it has been my pleasure the past few months to try its effects as an hypnotic and narcotic on several cases, my observations may be of interest to some of your readers. I have therefore taken from my note book the following cases for your journal:

1. *January*, 1870.—And. H., æt. 33 ;panophthalmitis ; came to my office. Gave him15 grs. chloral in solution. In twenty minutes he began to feel some relief from pain; and in one hour pain was gone and he slept for three hours. On waking, he complained of cold feet. Pulse reduced from 96 to 80. No action on the kidneys or bowels. Next day removed ball under chloroform.

2. *January*, 1870.—Edward B., æt. 22; tenonitis, after operation for strabismus. Gave 15 grs. chloral in solution. No sleep nor relief from pain for two hours; again given 15 grs.; had dull, drowsy feeling; relief from pain, but no sound sleep; dreamy and starting; headache in the morning. Next night gave 25 grs. in solution. In 45 minutes was sound asleep, and continued so for six hours. This time had no dreams nor headache on waking. No particular action in the kidneys or bowels.

3. *January*, '70.—Mrs. M. B., æt. 54; iritis—after Graefe's operation for cataract ; 25 grs. chloral in solution, given at night; relieved pain, and was comfortably asleep in 25 minutes; pulse beat 60; respiration good; perspired pretty freely. Sometime in the night was aroused by an alarm of fire near the Infirmary, and the running of the steam engines and ringing of the fire bells; but soon fell asleep again, and slept till morning. Considerable pain in the head next morning; attributed it to the disturbance during the night. Next night gave 25 grs.; slept well and comfortably for 7 hours; headache next morning; no action on the kidneys; bowels constipated —always had been so.

4. *January*, 1870.—Kate M., æt. 26; iridectomy for occlusion of pupils. Having considerable pain, ordered 20 grs. chloral in solution, at 9 P. M.; had ease in 15 minutes; in one hour was asleep, and continued so till 7 o'clock next morning without pain ; no headache; pulse and skin normal; no action on the kidneys or bowels.

5. *February*, 1870.—Mrs. G. N., æt. 30; iritis; had been suffering greatly for a week past; could neither eat nor sleep from pain; had taken sol. morphiæ from a neighboring druggist, but vomited immediately after taking it, and fearing to try it again she came to my clinic ; ordered 15 grs. chloral in solution; fearing to give her a stronger dose, as she was so weak and emaciated from the suffering, etc.; in 10 minutes was much easier, and in 30 minutes was sound asleep, remaining so all night. Awoke in the morning refreshed; no headache, but great hunger; ate a good breakfast, and seemed to do well all day. Towards night, pain returning, ordered 20 grs. in solution; she again slept comfortably all night without dreams; no headache ; no action on the kidneys or bowels the next day The pulse improved very much on the second day.

6. *February* 14, 1870 —T. F., Esq., æt. 45. I was called to this patient and found a severe

iritis, suffering great pain, with no sleep for several days and nights; pulse 96. Ordered 20 grains chloral in solution, and if that did not give him rest, 20 more in two or three hours. After the first dose he felt relief from pain in about thirty minutes, and dozed for about three hours, when waking with great pain the second dose of twenty grains was given him; he then slept for five hours comfortably. Next morning no headache; felt refreshed, and some appetite. All day had some considerable numb feeling. Toward night, pain increasing, ordered 20 grs., and he passed a comfortable night. There was no nausea, nor dreams. While going under the influence of the preparation he complained of being chilly, and had an extra blanket put over him.

7. *March* 14, 1870.—Mrs. E. W., æt. 40. Retinitis; great nervousness, ordered 15 grs. chloral in solution at night; in 30 minutes the patient was quiet for 3 hours, with no actual sleep; 15th, ordered 20 grs. in solution; in less than one hour was asleep, and slept soundly for 6 hours, considerable snoring during the time; no dreams, nor headache; pulse reduced from 94 to 84; skin and temperature good; kidneys act very freely during the day.

8. *May* 16, 1870.—Mrs. Cecilia S., æt. 55. Acute glaucoma; pain very great; small, emaciated person; ordered 15 grs. chloral in solution; pain relieved in 30 minutes, and soon slept soundly for 4 hours; on awaking was again given 15 grs, after which she slept without pain for 5 hours longer; she now took the notion that she would not take it any more, and for one day some morphia was given her, which made her so sick and miserable, that she was glad to return to the chloral; 15 grs. in solution given her, and again slept without pain or nausea for 7 hours; complained of a tingling sensation in the legs and arms; no action on the kidneys or bowels; pulse reduced. 4th day, after taking 15 grs.; awoke with considerable nausea, which soon passed off, and she took some beef tea, etc. This was the only time she had any nausea, and continued the chloral every night for some days yet, as she would not consent to any operation for relief.

9. *May* 29, 1870.—Mrs. Julianna B., æt. 64; iritis and beginning slough of the cornea, after Graef's operation for cataract; pain very great; weak, debilitated person; ordered 10 grs. chloral in solution, at 8 P. M.; in a short time the pain was relieved, and she slept soundly until 1 A. M.; 10 grs. again given her at that time, and she rested quietly till 9 A. M.; during the morning complained of a queer numb and tingling feeling throughout, with cold feet; the pulse was good, and temperature of the body normal, although she complained of being chilly; no headache. 30*th*.—10 grs. again given her at 9 P. M.; she slept in twenty minutes, and did not wake for eight hours, when she complained that the noise in the street woke her and had given her the headache; still cold feet; hot bricks had been put to them during the night; this small dose of 10 grs. was continued every night for several days, with very happy results.

10. *May* 19, 1870.—David P.. æt. 23: rupture of anterior capsule and iritis; pain exquisite; 30 grs. chloral in solution given; pain relieved, and sleeping soundly in forty minutes; slept the whole night until 6 A. M.; no dream; no headache; no action on kidneys or bowels; next day made iridectomy, and removed the softened, swollen lens; gave 20 grs. chloral, and that night slept well again.

11. *June* 14, 1870.—Kate T., æt.30; neuralgia oculi—with sick stomach; ordered 15 grs. chloral in solution the first night. It seemed to have no effect in the least. 25 grs. were given, which acted very soon, and she slept for 3 hours, with dreams and startings; awoke naturally; no vomiting; complained of great heat of the skin and head; no action on the kidneys or bowels.

Remarks.—It seems that there is a greater difference in the susceptibility to this agent than in the ordinary narcotics. It appears that the condition of the patient has more to do with its action than the age. Those who are feeble and weak, whether of long duration from ill-nourishment, etc., or debilitated in a short time from great pain and suffering, are the most easily affected by it, and require smaller doses. In case 1, where 15 grains acted favorably, the patient had suffered so greatly that he was completely prostrated. So also in the 5th case. Cases 8 and 9 were feeble, weak, ill-nourished persons. It is seldom that small doses of 10 to 15 grs. will have any effect in persons of ordinarily good condition; and in my experience, to get the proper action, it should be given in doses of 20 to 30 grs. at once, and not in frequent small doses. There were no heart complications present with any of the above cases, and I saw no

unpleasant symptoms, although cold feet and chilliness was complained of in some.

I found no influence on the secretions. Only in one case did the kidneys act very freely; but that I attribute to the extreme nervousness and excitability of the patient rather than to the action of the salt. There was nausea only in one case, and that was after morphia had been used first. In case eleven there were nausea and vomiting when it was given, which it seemed to suppress. Relief from pain always took place even when sleep was not arrived at. I was particularly struck with its similarity to chloroform in cases 6, 8 and 9, in the experiencing of the tingling sensation and the numbness.

Fearing severe phlegmon I have not tried it hypodermically. In reviewing these cases my experience, as far as it has gone, teaches me to agree with the remarks of Dr. Da Costa in his valuable paper in the *Am. Jour. of Med. Sciences*, April, 1870, "that it has decided hypnotic narcotic powers; but that its action is not always the same; that the sleep is not always speedily induced, nor without dreams. Nor does it seem to act on the secretions."

INSTRUMENTAL DIAGNOSIS.

By Philip S. Wales, M. D.

Of Philadelphia.

(*Continued from page* 71.)

We may also, in rhinal inflammation, employ various medicaments in the form of nebulization; a convenient and simple instrument for the purpose is seen in Fig. 15. It is arranged mechanically to fit it to the purpose designed

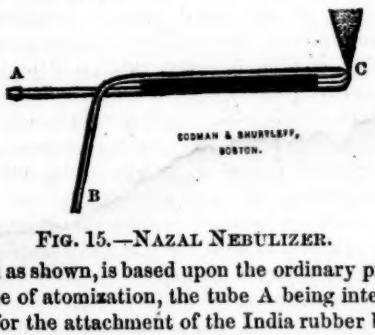

Fig. 15.—Nazal Nebulizer.

and as shown, is based upon the ordinary principle of atomization, the tube A being intended for the attachment of the India rubber ball pump; the curved extremity of the tube B to pass through the cork of a small bottle which contains the solution to be applied in form of spray, to the posterior nares. The two tubes are fastened together by a small piece of intervening wood, to which they are glued, forming a sort of stem sufficiently long to permit the point from which the spray issues to pass behind the velum.

In treating disease of the mouth of the Eustachian tube, Mr. Bishop makes use of the syringe shown in Fig. 16, and alleges that the

Fig. 16.—Bishop's Syringe.

spray enters into the cavity of the tympanum. It has the ordinary hand-ball attachment. The reservoir of the instrument is of glass, and graduated to adjust the quantity of fluid that it is desirable to nebulize. I have, however, not found that it answers the purpose of bringing the spray in contact with the naso-phyrangeal walls and Eustachian orifices so conveniently as the simple instrument above described.

The ordinary method of applying astringent vapors to the nares is simply to volatilize the substance in a vessel placed in a sand-bath, or in a bowl of hot water, or even drop it in the hot water, in this way the vapor arising carries along with it the medicine, which may then be inhaled through the nostrils.

Pomeroy has devised the little conical instrument, shown in Fig. 17, for applying the vapor of iodine to the nares. It is made of

glass, hollow, the cavity communicating exteriorily by three apertures, the one in the rear for the attachment of a hand-ball to propel

FIG. 17.—POMEROY'S VAPOR DOUCHE.

air through it; the second, at the side, through which a piece of sponge and a little tincture of iodine is introduced and corked up, and the third aperture at the point, from which the vapor of iodine issues, under pressure from the hand-ball, and enters the nasal cavities.

Powders of alum, calomel, or other agents, may be brought into contact with the diseased turbinate bones, by means of Rauchfuss' instrument which we shall show on a subsequent page.

In further illustration of the subject of chronic rhinitis, with swelling and blocking of the nares, we shall append the following case from Mackenzie, of a patient, Mrs. E., æt. 41, who applied in June, 1863, on account of a constant feeling of stuffness and troublesome pricking sensation in the nose. She said that for the last three years she always felt as though she had a cold in her head; but there was no discharge. She also had a constant inclination to snuff through the nostril. She had taken a great deal of medicine, and tried sniffing alum through the left nostril, but without any benefit. The physical conformation of the parts was favorable to rhinoscopy, and with the mirror the mucous membrane over the middle turbinated bone on the left side was seen to be so much swollen that it completely blocked up the left nasal passage. The mucous membrane was of a deep red color. With a curved brush he applied several caustic solutions to the affected parts. Solutions of nitrate of silver, sulphate of copper, and iodine were each used for some weeks, but the greatest benefit resulted from the last named agent. At the end of four months the subjective features of the disease had entirely given way and the patient considered herself cured. All the inflammation had subsided, but the mucous membrane, though no longer at all congested, was still a little swollen. Four months after the last application to the nares, the patient still felt perfectly well.

II.—ULCEROUS RHINITIS.

Ulcerous rhinitis, or ozœna, is a subject of considerable interest and importance to the rhinoscopist, as it is by no means infrequent, and the decision of the nature of the morbid changes, as they occur in the nares, can only be made certainly evident by the rhinal mirror. Considerable confusion has arisen in classifying the cases which fall under this head, from the difference they sometimes present in their symptoms. Some have regarded the fœtid ordor as a *conditio sine qua non* of what they call ozœna, and they are etymologically correct. But a better view to be taken of the matter is to reject the shackles of an antiquated nomenclature, and regard all cases where ulceration is present, with or without fœtor, excluding cancerous diseases, of course, as ulcerous rhinitis, modified only by the varying conditions under which it occurs. Under this view of the case we shall allude only to non-specific or common, and specific rhinitis, the former arising commonly from chronic rhinitis, and the latter from syphillitic infection.

(*a*) Common ulcerous rhinitis occurs always between the ages of ten and twenty-five, or thirty; it is characterized in its commencement by local symptoms not unlike those of chronic rhinitis, the secretions may or may not be offensive. Generally they are so, and they vary in color—yellowish, greenish, and even blackish, and in consistence being mostly fluid, but often coming away in greenish or dark-colored crusts. The nostrils are obstructed from the swelling of the nasal mucous membrane; there is more or less sniffling in consequence, itching, or even, in severe cases, a little pain. Ulcerative patches seated near the nostrils can be seen clearly with a good speculum in bright sunlight. When further back, of course, the pharyngeal mirror is indispensible, and an examination will reveal the ulcerated spots on the turbinate bones, or septum. The destruction of tissue in mild cases is but superficial, while in others it extends to the very bones, whose rough necrosed surfaces may be easily felt with a curved long aluminium wire probe. The mucous membrane is swollen, deep red, or of a bluish color, and perhaps separated from the parts beneath by infiltration. Stringy

mucous or pus hangs upon the turbinate bones or patches of the same material are seen, sometimes approaching a black color, upon some part of the surface as seen in the mirror. Semeleder relates an illustrative case in which a school boy, sixteen years of age, was affected with ozœna; there was ulceration upon the upper and inner edge of the left nasal cavity, and upon the turbinate bone of the right side with loss of substance of the middle turbinate bone (and necrosis of its bony structure), and finally a slight infiltration protruding in a point from the roof of the pharynx. The turbinate bones in the left side were bluish in color and hyperæmic. After a treatment of several months, consisting in keeping the parts scrupulously clean, and painting them with a solution of one grain of iodine, and one scruple of iodide of potassium, in an ounce of glycerine, and constitutional treatment on the supposition that the disease was a scrofulous origin. The patient got well. I had recently a case of a man twenty-four years old under treatment for the same disease, of thirteen months' standing. The pharyngeal mirror showed the existence of ulceration and necrosis of the inferior turbinate, and ulceration of the septum. Cure was effected by the local application of solution of iodine in glycerine, and general tonic medication.

(*b*) Specific ulcerative rhinitis depending on syphilitic infection may be detected with the pharyngeal mirror affecting the mucous membrane and turbinate bones. There is also usually an extension of the diseased process upon the walls of the pharynx and velum. The image presented will vary according as the ulceration is still progressive, or partially or totally healed. In the former case, the surface of the ulcer may be observed deep red and granular, smeared with muco-purulent matter, and irregular in shape; if the morbid process has penetrated deeper, the surface of the bone beneath presents itself to the eye, and its very hard surface may be made evident to the touch by the probe; portions of the turbinate bones and septum are sometimes entirely destroyed, giving the nares a more spacious area.

Syphilitic ulcers leave behind them, after being healed, alterations in the tissues easily perceived by the surgeon. An interesting case of such changes is related and figured by Semeleder, in a person, twenty-three years of age, cured by the use of mercurial inunction. The soft palate was entirely wanting; upon the edge of the loss of substance, at the left side, there was a bluish, smooth cicatrix; upon the right there stand granulations, which seem to continue along the floor of the nasal cavity, and from which a fine, reddish, transparent bridge leads to the nasal septum; the left inferior turbinate bone is wanting, save a stump; the right inferior and middle turbinate bones are partially destroyed; the mouth of the right tube cannot be well recognized amid the furrow and protuberances which surround it; in the neighborhood of the mouth of the left tube, and upon the external edge of the left cavity, there are respectively small yellow pointed infiltrations; the entire mucous membrane of the naso-pharyngeal space and of the nasal cavities is deeply reddened.

Last August I had the opportunity to examine an anologous case, in which the destructive process had gone to a much greater degree, there being a perforation in the hard palate through which I could introduce a mirror, and but a remnant of the septum remained anteriorly and superiorly. These old syphilitic changes of the naso-pharyngeal mucous membrane should not be confounded with those produced by rhinitis or unspecific ulceration, which sometimes leaves permanent cicatricial irregularities upon the membrane, but the history of the case, taken with the rhinoscopic appearances, will generally give the physician sufficient data for a differential diagnosis. A few days ago I examined a girl, 16 years of age, in which there were old syphilitic cicatrices. The broad and sunken bridge of the nose, and other objective and subjective symptoms, stamped the case positively as of venereal origin. In these instances, besides the local treatment, general medication for the constitutional disease will be required.

3.—EPISTAXIS.

In some rare cases, obstinate bleeding from the nose depends upon congestion and ulceration of the mucous membrane of the turbinate bones. I have seen this twice in children convalescent from scarlatina, and in one of them, though that disease occurred two years ago, I have had occasionally to apply local medication to the posterior nares to remove a congestion giving rise to occasional bleeding from the nose. A case of epistaxis, of much longer duration than any I have seen, is given by Gibb, of a girl, æt. 17, of stru-

mous habit, pale and delicate looking. She had had whooping cough, measles and scarlatina, when four years old; after the last she became subject to bleeding at the nose, which remained persistent, occurring daily from both nostrils, but more so from the left than the right. The catemania commenced in her sixteenth year. Rhinoscopy was difficult on account of some contraction of the velum palati from the scarlatinal angina (no doubt attended with ulceration, as cicatrices were seen here and there), yet it was carried out, and showed very red and vascular ulcers on the posterior surfaces of both inferior turbinate bones, which gave rise to the constant bleeding which had blanched the patient. Topical treatment, such as the application of a solution of nitrate of silver to the ulcers, and attention to the general health, were the chief means relied upon to bring about a cure.

4.—PHARYNGITIS.

Pharyngitis occurs, as does rhinitis, under three forms: acute, chronic, and ulcerative.

(*a*.) Acute pharyngitis presents itself as a diffused bright or bluish redness of the pharyngeal walls, hyperæmia and proliferation of the mucous membrane which presents strings or flakes of tenacious mucus adhering to it here and there, or is covered with a thin whitish pellicle. The other symptoms are a tickling or dryness, and a sense of heat in the throat, and some little difficulty in deglutition. This form of pharyngitis in rare cases penetrates to the cellular tissue between the pharynx and vertebræ, giving rise to retro-pharyngeal abscess, the projection of which towards the *choanæ* may be observed. This form of pharyngitis is sometimes found in connection with low fevers, particularly typhoid.

(*b*). Chronic pharyngitis is the result of repeated attacks of coryza; the mucous membrane is very frequently the seat of limited pharyngitis, and few persons escape during cold, damp weather having some change of this sort produced, but the symptoms are not at all sufficiently marked in the majority of cases to attract attention; perhaps a little hoarseness, or sense of dryness of the parts, which soon pass away, are the only phenomena presented, yet if the pharynx is examined it will present patches of redness, on one side or the other, often on both sides of the median line; at other times the surface appears covered with a thin, glistening, varnish-like membrane, or is rough and red, or granulated.

What is called granular pharyngitis, is the result of inflammatory alteration in the glandular structure of the membrane, producing neoplastic infiltration of its tissue under the form of little prominences, mostly seated upon the posterior pharyngeal wall, varying in size from a pin's head to a split pea. This condition of the parts may occur in the sinuses of Rosenmüller, which is, particularly rich in follicular glands, and the hypertrophy of the mucous membrane leads to obstruction of the Eustachian tubes. These appearances may be observed in the rhinoscopic mirror. The discharge of mucous secretions of varying character from the throat is often considerable, and causes the patient most anoyance in the morning, after he rises from bed, as it has then accumulated in the pharynx by the inactivity of the muscles of this cavity, and the horizontal position of the head during sleep. The patient feels a sensation of dryness and irritation in the throat, hawks constantly until the matter is expelled, when there is exemption from the annoyance until the next morning. Chronic pharyngitis is also connected with gastric derangement, and as already stated it has been suggested that they stand in the relation of cause and effect, the pharyngeal secretion causing irritation of the gastric mucous membrane. Many cases of the so-called clergyman's sore throat are follicular pharyngitis; habitual tipplers are likewise with clergymen frequent subjects of the same form of disease.

(*c*). Ulcerative pharyngitis is most always observed as a result of syphilitic infection, the rare cases of simple ulcerative pharyngitis having been first observed by Louis as occurring in typhoid fever after the twenty-fifth day. The ulcers are usually small and numerous, or occurring in one large patch, and are evidently seated in the glands of the pharyngeal mucous membrane.

Syphilitic ulcerative pharyngitis is exceedingly tardy in progress, and the rhinoscopic appearances will vary with the period at which it is observed. The ulceration may be superficial, occupying any portion of the pharyngeal walls, or the posterior surface of the velum, or may have gone on to extensive destruction of the soft tissues down to the very bone which then appears necrosed, leading in its removal to perforation of the palate; the

mucous membrane is deep red, infiltrated, and covered with muco-pus, and when the ulceration has involved the Eustachian apertures, the hearing will be much impaired or even altogether extinguished.

Pharyngorrhagia, or hemorrhage from the pharynx, has been observed to occur in exceptional cases, and examination has showed it in one instance to proceed from enlarged vessels, and in another form an erosion of the posterior pharyngeal wall. The mirror is of assistance in revealing the seat of disease, and in facilitating the application of appropriate remedies for its relief.

The inflammatory and ulcerative actions that we have now spoken of as affecting chiefly the mucous coating of the naso-pharyngeal cavity, may in some cases extend deeper, and involve the muscular layer of its walls, impairing materially the functions of the individual muscles composing it or in connection therewith, thus producing difficulty or pain in swallowing and speaking, rendering the *laxator palati* incapable of discharging its functive in controlling the opening and closing of the Eustachian tubes, thereby disturbing the physiological equilibrium of the air in the cavity of the tympanum, and marring the hearing. Swelling of the faucial arches may produce the same result by the mechanical pressure they exercise upon the tubes.

5.—MORBID GROWTHS.

(*d*). The most common sort of morbid growths found in the naso-pharyngeal cavity is polypus, but before we consider that subject, it will be necessary to remark that in some cases we encounter certain irregularities in the surfaceof the mucous membrane of the septum, which sometimes becomes hypertrophied and presents tumor-like projections which are always slow in growth, and according to Czermak and Semeleder, give rise to no annoyances whatever; the latter author remarking, in relation to this subject, that we find not unfrequently upon the lowerthird of the nasal septum, near the pale yellow band, which corresponds to the edge of the tumor, the mucous membrane, more or less arched forward, puffed out, and forming little irregularities. The color of these protuberances is never the deep red of the mucous membrane of the pharynx, which is shown upon the superior third of the septum, but yellowish, shading even to a bluish grey. These protuberances are of various sizes, their surface sometimes smooth, sometimes finely granular, like a strawberry. It is manifest that these "growths" are seated somewhat deeper than the free edge of the septum even within the nasal cavities. In one case this growth included the middle and inferior third of the nasal septum, in the shape of two long lateral tumors of a fine granular surface, situated upon the septum, which, diminishing downward, unite, and together have the form of the heart of playing cards; at the same time the upper portion of the septum is represented as arrow-pointed, smooth, yellow, and shining.

I call attention to the remarks of Semeleder, as I have seen several instances of the same sort, and in my own case this condition is well marked, except the median swelling is oval instead of heart-shape, and in its width occupies the whole space between the inferior turbuate bone and septum.

6.—POLYPUS.

The naso-pharyngeal cavity, like others lined with mucous membrane, is liable to that form of morbid proliferation called polypus. We find the two common varieties, gelatinoid and fibrous; the former is pyriform in shape, composed of loose fibro-cellular tissue, filled with a thin albuminous fluid; it is found most commonly adherent to the turbinate bone, particularly the upper, by its narrow constricted portion or neck, and exists singly, or in broods as it were, varying in size from that of a bean to that of an oyster. The other, or fibrous polypus, generally exists singly; is attached to the mucous membrane by a swollen base, and occupies some part of the pharyngeal walls or *choanæ*, and as its name imports, consists of white glistening fibres, interlacing among themselves in the most intricate manner. The surface of the growth is dark-red or purplish in color, and bountifully supplied with blood-vessels.

When the polypus is of moderate extent, and does not fill up the pharyngeal cavity, its character and attachment may be accurately ascertained with the mirror; if larger, the utility of the mirror will be confined to studying the surface character of the growth only, and to aid us in applying our ligatures or wire nooses for galvanic cautery. We shall again refer for an illustration of the rhiniscopic character of this sort of growth to Semeleder's valuable treatise on rhiniscopy. It was the case of a boy who immediately before the removal of a naso-pharyngeal polypus by means of

the galvano-caustic, presented the following pathological condition :

At the opening of the left nostril lay a soft, elastic, bluish-red mucous polypus, semi-transparent, and of an oval shape, which was quite movable, and attached superiorly. If this was elevated by a chisel-shaped probe, it was seen to lie upon a second polypus much paler and more firm, situated upon the floor of the nasal cavity in such a way, that between the two the space was almost entirely filled up.

The finger, passed behind the large and flaccid vellum, felt a quite firm body hanging down, about as large as a walnut, rounded off and having two lobes; it could be completely circumscribed, and was seated with its broad root upon the anterior half of the roof of the pharynx, and over the nasal septum. Besides, the finger felt in front of the polypus the entire left nasal cavity filled with an uneven, rather thick, polypus formation. The right cavity was somewhat narrowed by the nasal septum, which was pushed toward the right side ; it was otherwise clear and accessible to the index finger for a considerable distance. The nasal bones are pressed apart somewhat; respiration through the nose was rendered difficult, especially through the left nostril ; the sense of smell almost entirely absent ; the swallowing was not affected.

The examination with the naso-phyrangeal mirror exhibited the pharyngeal branch of the polypus very plainly as a bluish-red, shining, round body, with numerous enlarged vessels, and with its surface partially eroded. The mouths of the tubes, the septum, and the walls of the nares, which a few weeks before were still partly visible, could no longer be seen ; on the contrary, a part of the pharyngeal portion of the polypus, which at first had been concealed by the everted velum, was now seen.

The operation was performed by Dr. Zsigmondy, by the galvano-caustic, without the loss of blood, except a slight flow which occurred during the application of the wire. The nasal and pharyngeal portions of the polypus were removed separately. The entire weight of the mass was about four drachms, and about the size of a goose-egg.

After the operation, repeated hemorrhages occurred from the left nostril, so that frequently the tampon was necessary. Seven weeks after the operation the patient was discharged cured. The rhinoscopic characters were then the following : The nasal septum was seen pressed so far towards the right that the right cavity seemed only a crevice of 2 to 3 ‴ in width, while the left was much enlarged. At the base of the skull, towards the left (seen in the mirror), there was a slightly curved bluish-gray cicatrized surface, the point of attachment of the pharyngeal portion ; and upon the upper and exterior region of the left nasal cavity, within the opening of the posterior nares, there was a yellowish-green crust of dried pus and mucus, the imperfectly cicatized point of attachment of the nasal portion. The rest of the mucous membrane of the naso-pharyngeal space was very uneven ; the mouths of both tubes were normal ; that of the left was directed somewhat downwards. That the right nasal cavity should be so much constricted at the time of the patient's dismissal, whilst before the operation the point of the index-finger could be introduced into it, can be explained by a still further inclination of the septum from the repeated application of the tampon to the left nasal cavity.

We must be careful, in our rhinoscopic explorations, not to blunder in confounding an enlargement of the turbinate bones with a polypoid growth, even in the healthy condition, as recorded by several authors. Skillful surgeons have committed this mistake, taking the middle turbinated bone for a polypus. Now, this would be much more likely to happen if the mucous membranes covering the bones be much thickened and obstruct free respiration ; but careful consideration of the characters distinctive of each of these conditions already pointed out, will be sufficient to prevent mistakes.

7.—FOREIGN BODIES.

Foreign bodies impacted in the nares may often be seen, when they occupy a position well back in the meatuses, with the pharyngeal mirror. Such objects as beads, seeds of various sorts, have thus been discerned and removed by means of a pair of long forceps, curved at the point.

8.—DISEASES OF THE EUSTACHIAN TUBES.

We shall only say a few words concerning diseases of the Eustachian orifices. These tubes have an intimate relation with parts in the naso-pharyngeal space, and particularly with the lavater palati, the normal action of which muscles is indispensable to perfect hearing. Dieffenbach was the first to make known this connection, demonstrating that

most persons with cleft palati were also hard of hearing. In such cases, the muscle has no fixed point from which to exert an influence upon the mouth of the tube required in the proper performance of the function of hearing, which is entirely restored in most cases by the operation uniting the fissure. Semeleder further directed attention to the difference in shape of the Eustachian orifices in fissured palate to what obtains in the normal condition.

The condition of the mucous membrane in the neighborhood of the Eustachian orifices must also influence the function of hearing, and these conditions are made known by rhinoscopic examination. Plugs of yellowish mucus are often seen after good convalescence for scarlatina, chocking into these orifices, and even in catarrhal cases, but do not seem to impair the hearing in the least; a short time since I examined the throat of a gentleman who had had a slight attack of the disease, and three months later, these yellowish mucus plugs were quite evident; the hearing was not at all affected. I have seen a number of such cases. The mucous membrane may be swollen about the tubes, occluding their caliber, or it may be the seat of little tumors of varying appearances—long, smooth, semi-circular swelling of the tissues, or distinct, deep red, globular or cock's comb growths. This region may also be the seat of considerable tumefaction from enlargement of its numerous glands.

There are other rare conditions of the Eustachian orifices, which need only be noted so that the observer may be prepared to recognize them when presented. The orifices may be unsymmetrical in position, or their lips may be connected by cicatricial adhesions.

The aurist will find some aid also in introducing the Eustachian catheter as this can be done with certainty, when with the phyrangeal mirror, the Eustachian orifice and point of the catheter can be kept in view at the same moment; but this subject does not fall within our province.

—A sufficient amount of money has been subscribed to secure the erection of a suitable memorial to the late Professor Faraday. The chief contributions came from men of science. About $7,000 (gold) have been received. The present scheme is to erect the memorial in the British Museum.

Medical Societies.

CINCINNATI ACADEMY OF MEDICINE.

May, 1870.

By W. Minor Logan, M. D.

(Reported by J. W. Hadlock, M. D.)

Pathology and Treatment of Tubercular Consumption.

Without pausing to discuss the relative merits of the various theories that have been proposed concerning the nature of this disease, or for other preliminaries, I proceed to the consideration of some investigations that I have recently made.

The chemical analysis of tubercle shows that the phosphates, especially the phosphate of lime, is the inorganic element of this morbid deposit, just as iron is an inorganic element of hæmatin.

And according to that law of physiological chemistry known as vital affinity, we would reasonably expect that the introduction of the phosphates into the system of a tuberculous subject, would give rise to a corresponding increase of the tubercular deposit.

And by a series of experiments, conducted by Mr. John Taylor, upon tuberculous subjects in the Liverpool work-house, they were found to hasten the development of the disease, and would therefore seem to tend conclusively in the estimation of that gentleman to the establishment of our hypothesis.

Such distinguished men as Profs. L. M. Lawson, George B. Wood, Henry Hartshorne and others, after repeated trial of the phosphates and hypophosphites of lime, soda, and potassa, have published the results of their experiments, expressing their discouragement.

I do not know of any one who now claims for them that degree of reputation which Drs. Stone, Churchill and others at one time anticipated that they would enjoy.

I have, indeed, been employed in cases in which the patient had gradually sunk under them in the care of other and first-class practitioners, when a directly opposite course of medication was instituted, followed by the most flattering results.

"The urine of tuberculous subjects," says Lawson, "appears to contain less solid constituents, particularly the nitrogenised elements, while the salts, especially the phosphates, are in excess;" and this statement has been supported by the majority of my own observations. Niemeyer, in speaking of "laryngeal phthisis" says, that in the progress of the disease, the laryngeal cartilages frequently undergo ossification. He also states, as do all others, that "it is exceptional for persons deformed by rachitis" (in whose systems there is a deficiency of the phosphates,) "to become or die tuberculous." "Freund,

of Breslau, regarded ossification of the first costal cartilage as a cause of phthisis, on the hypothesis that it prevented the free expansion of the chest, and by its acting as an irritant produced inflammation at the apices." I, myself, when a student, long before the conception of this theory, in opening the chests of a number of tuberculous *cadavers*, observed that *all* the costal cartilages were quite hard: one case in particular, a young female apparently about twenty years of age, in one of whose lungs were large tubercular masses, while in the other was a large cavity; and whose costal cartilages were almost hard as bone, which I then attributed to the disturbance of circulation and nutrition as having probably given rise to an almost perfect state of dryness in those tissues. Concerning the greater prevalence of phthisis among the poor than among "the more well-to-do classes," Niemeyer attributes to the food of the former being chiefly vegetable; and this, it is well known, is the principal source of the element now under consideration.

"In ordinary food, there is more of the phosphates than the system has need of; and in those very disorders in which they are supposed to be indicated, they are not unfrequently in excess in the blood and urine."

Dr. FRICK, of Baltimore, analyzed the blood of four cases during the existence of crude tubercles, and states that, among other deviations from the normal standard, he detected an increase of lime; the quantities in the different cases being respectively: 272, 257, 276, 283; remarkably contrasting with 183—the normal proportion; and BAUMES claims to have detected in the blood an excess of phosphoric acid. Again, bearing on this point, Dr. Lawson, in treating of gray tubercles, says: "they vary in size from that of a millet seed to that of a pea; and in consistence from a soft structure *to almost cartilaginous hardness*; being somewhat friable, and presenting a granular surface when cut." It is obvious that their soft structure is most probably due to the deposit being quite recent; still, in a partial state of solution, their more fluid constitutents not yet having been absorbed—and that "*their almost cartilaginous hardness*" is due to their being to a great extent of a calcareous nature, with their fluid properties completely absorbed.

In regard to cretaceous tubercle, Dr. Lawson says: "the chemical analysis of cretaceous tubercle shows that the animal matter becomes absorbed, while the earthy or inorganic materials remain. The relative proportion of the organic and inorganic substances in the two forms of tubercle becomes exactly reversed, when the cretaceous change occurs; which is doubtless due to the absorption of the organic, while the vessels are incapable of taking up the inorganic. Pathologists speak of this change as absorption of the organic elements, while the deposition of the inorganic continues, and thus replaces the former substance. According to this view, the earthy material is an independent secretion, continuing after the deposit of the ordinary tubercular matter has ceased. It is far more probable, however, that the whole mass is deposited in the usual form and composition of tubercle, and that the ulterior changes result from the absorption of the fluid elements, while the earthy substance, being incapable of reëntering the vessels, remains in the cavity."

Thus it is seen that the phosphates, especially the phosphate of lime, perform no insignificant part in the process of tuberculization, and development of phthisis. Now, in regard to the origin of tuberculosis, let us draw a parallel, by which may be seen the most striking analogy.

Sugar normally exists in the blood, nowhere else than in the venous circulation, between the liver and lungs. In the lungs it is destroyed by the catalytic action of the air; being converted first into water, second into lactic acid, third into a carbonic acid, then and there being voided by the respiratory process. (*Williams Principles of Medicine, p.* 163).

Now, if from some defect in elaboration, (as often occurs in persons possessing the rheumatic diathesis,) the third change by which the lactic acid should be converted into carbonic acid does not take place, blood poisoning would soon be manifested by symptoms of acute articular rheumatism. So may it not also seem probable* that the phosphates to a certain extent normally undergo some catalytic or other change, either preparatory to performing, or after having performed their function in the economy, and that in the presence of the tuberculous diathesis, by this physiological process being interfered with, either by preëxisting debilitating causes, or otherwise, a state of cachexia or blood poisoning is produced, which, failing to be eliminated from the system, increases in quantity until finally its existence becomes manifested by the familiar phenomena which accompany the development of tuberculosis. Concerning the deposit of tubercles, the theory accepted by Lawson, Watson and others was, that it took place by the exudation (perhaps spontaneously in most cases) of a certain specific humor (by us supposed to be to a great extent of a calcareous nature) and Prof. J. H. Bennett says that "calcareous deposits which do not assume the form of a bony-growth are usually the result of an exudation."

According to the accepted theory on tuberculosis proper, two separate and distinct forms of tubercle were recognized, viz: the gray and the yellow.

In regard to the ultimate tendency or result of the two varieties, Dr. Lawson says: "While the

*When the sabulous deposit, (that is, the phosphates in the urine) "depends upon certain disordered states of digestion, this agent may prove beneficial by restoring the tone of the stomach."

yellow variety naturally tends to softening and elimination, the gray as constantly undergoes a retrogressive action, and never softens except as a result of its possible transformation into the former species."*

How could the gray become transformed into the yellow variety? By acting as a foreign body it would cause inflamation, and the *consequent exudation* would be in the immediate vicinity of, and around the mechanical irritant, and as the more fluid constituents of the exudation would be becoming absorbed by the surrounding lung tissue, its more plastic or solid elements would accumulate around and adhere to the gray tubercle previously deposited, thus transforming the gray into the yellow variety. And we can thus easily understand why yellow tubercle contains a preponderance of albuminous or albuminoid material over either the gray or cretaceous varieties. And the degraded condition of the blood plasma presently to be alluded to, which would furnish the exudation with corpuscular, rather than coagulable lymph, explains in my opinion the source of the caseous matter of crude tubercles, which Niemeyer seems to attribute to a different process. Then, my opinion is, that after the tubercular exudation, or the exudation of the *sui generis* specific poison, gray tubercle is the initial lesion of tuberculosis, just as chancre is the initial lesion of syphilis.

Thus far I have explained the probable *modus operandi* of tuberculization; that is, the production of a specific poison, which became deposited in the form of a semi-fluid exudation, its development into gray tubercle, which afterward became transformed into yellow tubercle, and this, (if not destroyed by suppuration and softening), as a curative agency, into cretaceous tubercle. I will here waive any remarks on the SOFTENING OF TUBERCLES, but merely state that I consider it as being purely suppurative, and an effort of nature to rid herself of the abnormal deposit, just as thorns and other foreign bodies are removed from the flesh by festering. In this latter view I am supported by Sir Thomas Watson.

Having considered the four stages of the development of tubercle, I will now speak of two frequent, indeed almost constant, concomitants of this disease. I now have reference to the pathological or aplastic condition of the blood plasma, and to fatty degeneration of the liver; which, as will hereafter be seen, have a special relation to my method of therapeutics. "Fibrine, identical with the buffy coat of the blood, is the material of which new membranes and cicatrices are formed; it is the *coagulable lymph*, indeed, which is the plasma or basis of the constructive and reparative process. In its capacity for these processes, fibrine exhibits some modifications of condition, constituting degrees of plasticity. Thus, in a healthy state (euplastic), it forms a fine congeries of minute fibrils, which, having a high capacity for life, may become organized in a high degree, as in the case of false membranes, resulting from acute inflammation in a healthy subject. But in many instances this high capacity is degraded, and the nutritive material is *cacoplastic*, with fewer and less perfect fibers, and with more corpuscles, giving the exudation more opacity, and is susceptible of only a low degree of organization, as in the indurations resulting from low or chronic inflammation, in cirrhosis, gray tubercle, etc.; or it is *aplastic*, not organizable at all, abounding in degenerating corpuscles with few or no fibers, as in pus, curdy matter, yellow tubercle, etc." "In case of deficiency of fibrine from the presence of a febriferous or putrescent poison in the system, it is not to be expected that azotized food, rest, or any other means, can remove the deficiency, so long as the poison remains in active operation. This poison, by its septic or other analogous influence, interferes with the vital process by which the fibrine is formed. But no sooner does the influence of the poison subside, as evinced by an improvement in the symptoms, than the quantity of the fibrine increases; and this faster than could be explained by any increase of nourishment taken."

Fatty liver, also, is almost peculiar to phthisis. In three years, Louis met with it forty-nine times, and forty-seven of the patients died phthisical. It occurred in one-third of the victims of consumption; whereas, among 223 cases not phthisical, there were only two examples of this hepatic change. I will now say a few words in regard to my method of

Treatment.

Seeing that cod-liver oil, whisky, and other fashionable (and in many cases objectionable) medicinal agents are far from being even reliable in the treatment of this disease, a sense of obligation to the honor and integrity of our humane profession, and to the welfare of the suffering and dying victims of tuberculosis behooved me to the study and cultivation of this disease as a specialty, in quest of something curative, in addition to our elaborate category of palliative medicines. And I now take great pleasure in candidly stating, that I feel confident of suggesting a great improvement upon even the most recent therapeutics, by modestly recommending to the profession, *nitric and muriatic acids* in the treatment of *pulmonary phthisis*. In regard to the medical properties of these agents, parties are referred to works on therapeutics. For the present, I will recapitulate briefly some of the opinions of a few of the most eminent authorities. Nitric acid is tonic and antiseptic, having been successfully

*"Lænnec accepted this conversion, which Rokitansky for a long time denied, but now considers frequent." "Hérard declares it to be universal."

used in the treatment of typhus and malarial fevers. "Dr. Arnoldi, of Montreal, proposed it as an almost specific remedy for *whooping cough*; and his recommendations have been sustained by Drs. Gibb, Witsell, Atcherly, Menelly, Noble, and others. Under its use the violence of the paroxysms is said to be greatly mitigated, and the duration of the disease abridged by more than one-half." "In *chronic bronchitis* with exhaustion of the system, and a frequent hariassng and paroxysmal cough, Dr. Glover derived material advantage from the employment of this agent."

"Five or six drops of nitric acid in a glass of sweetened water taken twice a day has been highly recommended for the removal of *hoarseness* in singers."

It has been highly eulogized for its efficacy in syphilis and chronic affections of the liver; on the hypothesis that its action was somewhat like that of mercury. And in the treatment of fatty degeneration of the liver, which I previously mentioned as being a frequent concomitant of phthisis, Dr. C. J. B. WILLIAMS, of London, recommends "nitric and muriatic acids, upon the hypothesis of their being of an opposite nature to fat, thus affording abundance of oxygen, which may remove a part of the superfluous fat, at the same time supplying azote, which may contribute to the formation of a more highly animalized plasma."

Chapman and Rayer speak in the most eulogistic manner of the internal use of nitric acid in the treatment of *impetigo*, and scrofulous sores presenting a cancerous aspect, after all other forms of treatment had signally failed. Supposing its virtues to depend upon its furnishing azote in a concentrated form, at the same time being an alterant, thus promoting the formation of the nutritive fluids.

And in the treatment of the degraded condition of the fibrine, which I before quoted from Dr. Williams, both when it depends upon ordinary causes, or "when it depends upon the presence of a febriferous or putrescent poison in the system," this eminent clinician recommends these two agents, in the first instance, on this hypothesis—"which, from their power in stopping passive hemorrhage, in augmenting the muscular substance and strength, and in causing the healing of phagedenic and flabby ulcers, seem to have some more direct means of promoting the formation of the plasma of the blood, than by their mere operation on the digestive organs." And in the second instance he says: "Their beneficial operation is probably connected with their antiseptic as well as with their stimulating power." "As nitric acid dissolves both uric acid and the phosphates, it was supposed to be applicable in those cases of gravel in which the uric acid and phosphates are mixed," and in support of its anti-phosphatic* virtues I could, if space permitted, make elaborate quotations from such eminent authorities as Golding Bird, Brodie, and others.

In regard to the medical properties of muriatic acid, I would say that they are somewhat similar to those of nitric acid; it being tonic, antiseptic, antiphosphatic, cholagogue, etc. I use this agent merely as an adjuvant to nitric acid, on account of those properties just mentioned; adhering more tenaciously to nitric acid as being of greater utility on account of its highly reputed efficacy in "whooping cough," "chronic bronchitis," and "the hoarseness of singers," showing that it exerts a peculiar soothing influence on the irritable state of the lungs, probably in the same way that chlorate of potash thus acts on irritable conditions of the larynx, or through some other peculiar agency. Suffic it to say that such properties are undeniable in the presence of so much eminent authority. Again: the most approved diet for consumptives in modern practice has been beef-steak, mutton chops, veal cutlets, and other articles of the nitrogenous variety. "Nitrogenized foods," says Thomas, "are substances containing nitrogen, and supposed to be the only substances capable of being converted into blood, and of forming organic tissues." (Thomas' Medical Dictionary, p. 359.) This being the case, it will readily be seen that inasmuch as "nitric acid is the source whence all the other compounds of nitrogen are obtained" (Silliman's Principles of Chemistry), the introduction of it into the stomach during primary digestion will render the food more highly nitrogenous by reacting upon the contents of the stomach forming nitrates. Bearing somewhat on this point, I here quote a paragraph from a very excellent paper on "The Digestive Assimilation of Medicines," by Dr. W. J. Elstun, of Indianapolis: "Medicinal substances are assimilated by the same selective or physiological affinity, through which each organ selects from the blood the particular food material required for its own support, nourishment or vitality."

From the foregoing statements it will be seen that both these agents, more especially the nitric acid, however, are appropriate remedies for the treatment of all stages of the disease; their combined properties being appropriate in all, but more especially in the first and second stages, when the tubercular matter is being formed and deposited. And, in the third stage, when excavation is taking place, it does not seem improbable that their antiseptic properties should, to a certain extent, antagonize the breaking down of tissue that accompanies and

*Prof. Bartholow while, agreeing with Prof. J. H. Bennett and other pathologists that the derangement of digestion incident to phthisical cases consists in part of excessive acidity, says that this condition prevents the oxydation of the phosphates, which "change" he considers necessary to prepare them for assimilation; and that in such cases the mineral acids are always indicated, owing to their tonic and oxygenating properties.

constitutes a part of the process of suppuration and softening of tubercles, in the same way that those properties of *carbolic* acid thus act when locally applied.

Now, a few words in regard to the employment of these remedies: Nitric acid I administer in doses of gtt. xl. of the officinal dilute *in pure water* f℥ij. immediately after each meal, for the purpose of aiding digestion, and for other reasons already given. The quantity of muriatic acid which I administer is contained in gtt. xxx vel. gtt. xl. of *tr. ferri chloridi*; giving this agent for the two fold purpose of both the acid and iron, having it taken, sufficiently diluted, half an hour before each meal, thereby getting its stimulating or appetizing influence.

Finally, while I claim for these two agents a great degree of superiority over even the most recent *recognized* therapeutics (considering alcoholic stimulants as being worse than useless, except in cases of extreme exhaustion). I would also state that it is not my intention thus to supercede cod liver oil, suitable food, good hygienic, and other valuable and important measures, but that the medicines by me suggested are intended only as adjuvants to other appropriate measures at the discretion of the practitioner.

Neither do I propose, by this method of treatment, to cure "tuberculous diathesis," any more than colchicum and the alkalies will cure "the rheumatic diathesis."

I have thus thrown together a few thoughts upon this interesting and important subject, and if pulmonary consumption henceforth ceases to be the opprobrium of our profession, or, if inquiry is hereby excited, my object will have been fully attained.

P. S. Hereto appended is (for sake of brevity) a tabulated report of cases which seem to support the views here given. (*See Table, page* 118.)

As stated in the preliminary remarks, the cases were treated with nitric and muriatic acids, aided by various auxilliaries as counter-irritants, narcotics, expectorants, cod liver oil, where it was tolerated, etc., using very little alcohol, however.

I may briefly mention, by way of comment, upon case 1, that Thomson's line on the gums was noticed to have entirely disappeared on the 16th of June. Patient had no cough to indicate the presence of inflammatory action, therefore my diagnosis was tubeculosis of the gray variety; and the total disappearance of percussion dullnesss and abnormal respiratory sounds was, in my estimation, proof positive of the anti-phosphatic virtues of the treatment. This patient, like all others, was very much emaciated.

Case 2 was emaciated to the most profound degree. Gained 10 or 15 pounds more than his original weight by the 1st of November, from which time he pursued his occupation during the day, and attended night school throughout the winter. I have not seen him for some weeks, but a casual examination then indicated some evidences of pulmonary lesion.

Case 3 had been in bad health during three years preceding, at which time she had a miscarriage, with loss of a great amount of blood. On the 17th of October I received a letter from her, stating that her health was then good as ever.

Case 4 being a scrofulous subject took *syr. ferri iodidi* instead of *tr. ferri chloridi*. At time of dismission, although his general good health was good there was still some evidence of lesion in the right lung.

Case 5 had been able to pursue her occupation *without fatigue*, six weeks prior to dismission, while the catamenia had for three months been perfectly natural.

Case 6 was a perfect success, except a slight flattening of the thoracic wall under the right clavicle.

Cases 7 and 8, like all the others, except case 1, had the peculiar cough and sputa characteristic of the respective stages of the disease.

Case 9 improved rapidly under my treatment, but in two months, owing to her removal to a distant part of the country, passed from my further observation.

Case 10, owing to intra-thoracic tenderness, could have no physical examination made. She improved favorably twelve days, when her death was in part caused by a fresh exposure.

Case 11, notwithstanding her miserable sanitary surroundings, is the most satisfactory case of any kind that I have ever treated. She had occasionally expectorated cretaceous tubercles, which occasioned great inconvenience, suffocation, etc., prior to my attendance, but now, when they are expectorated, it is done with perfect facility. This, I think, is perhaps in part due to the antiphosphatic virtues of the treatment, and for further comment on this point, see paragraph on *modus operandi* at close of these remarks.

Case 12 was so low that I was unable to make any satisfactory physical examination. He had been unable to eat or sleep satisfactorily for three months prior to my attendance, and neither appetite nor rest could be obtained, the latter not even by narcotics, of which all were tried in maximum doses, but without avail; he gradually sunk, and died on the 20th of February. In neither of the two fatal cases was I able to obtain an autopsy.

Case 13 is a man broken down by debauchery, and has obstinate dyspepsia.

Case 14 is a man broken down by debauchery, as evinced by his previous history and present condition; but never h less the treatment of his case has been throughout of the most satisfactory char-

DATE.	CASE.	AGE.	SEX.	TEMPERAMENT.	MARRIED OR SINGLE.	OCCUPATION.	NATIVITY.	PHYSICAL CONDITION.	LENGTH OF TREATMENT.	RESULT.
1869. May 18	1st.	33	Male.	Bilious.	Married.	Clerk.	German.	Dullness on percussion; rude inspiration; prolonged expiration; bronchial breathing and broncophony over the upper ⅓ of superior lobe of left lung.	3 months.	Recovery.
"	2nd.	16	"	Nervo-sanguine	Single.	Wire-weaver.	"	Cracked pot resonance, with cavernous respiration and pectoriloquy over the entire sup. ¼ of right lung. Also dullness on percussion, rude inspiration and prolonged and jerking expiration with occasional moist crackling at apex of left lung.	13 "	"
June 3rd.	3rd.	26	Female	Bilious.	Widow.	Teacher.	U. S.	Slight dullness on percussion, rude and tremulous inspiration, and dry crackling on forced inspiration, with prolonged expiration at apex of left lung. No change except slight exaggeration of the breathing sounds on right side.	3 "	"
" 15th.	4th.	17	Male.	Phlegmatic.	Single.	Apprentice at tailoring.	German.	Broncophony and mucus rale approaching cavernous, with dullness on percussion over the sup. ⅓ of upper lobe of right lung. Also friction rales and slight rudeness and prolongation of the respiratory murmur, with slight dullness under left clavicle.	8 "	"
" 26th.	5th.	22	Female	"	"	Saleswoman.	U. S.	Decided dullness on percussion, with dry crackling and rude inspiration, while the respiratory effort was much prolonged over the upper part of left chest. Also, sonorous and sibilant rales over both lungs.	6 "	"
July 4th.	6th.	22	Male.	Nervo-sanguine	"	Clerk.	England.	There was great dullness with local depression, rude inspiration and prolonged expiration at apex of right lung. The same but less marked on left side.	6¾ "	"
" 20th.	7th.	27	Female	Nervous.	Married.	House-work.	German.	Dullness over the upper ¼ of left lung, with rude inspiration, prolonged expiration, bronchial breathing and broncophony. Slight dullness, with rudeness and prolongation of the respiratory sounds at apex on right side.	6 "	"
Aug. 3rd.	8th.	23	"	Nervo-sanguine	Single.	Prostitute.	U. S.	Considerable depression and dullness with humid or moist crackling, bronchial breathing and broncophony under right clavicle. Also, some evidence of deposit at other apex.	7½ "	"
Sept. 18th.	9th.	18	"	Bilious.	"	Nurse.	Colored.	Amphoric resonance, with cavernous respiration and pectoriloquy in the upper lobe of right lung. Also, dullness over the entire left lung, with mucus rale and ægophony over its superior lobe.	2 "	Favorable.
Oct. 18th.	10th.	12	"	Nervous.	"	House-work.	U. S.	* * * * * * * * * * * *	23 days.	Died.
Nov. 29th.	11th.	32	"	Bilious.	Married.	" "	" "	Infiltrated tubercle diffused throughout the entire upper lobe of left lung. Cavernous respiration and pectoriloquy at apex of right lung.	7 months.	Recovering.
Jan. 8th, 1870.	12th.	28	Male.	Nervous.	"	Laborer.	German.	* * * * * * * * * * * *	6 weeks.	Died.
" 15th.	13th.	45	"	Bilious.	"	"	"	Considerable tubercular deposit at apex of both lungs.	5 months.	Stationary.
Feb. 16th.	14th.	44	"	"	"	Tinner.	U. S.	Considerable flattening of thoracic wall with dullness and other signs of tubercular deposit at the apex of right lung. Same, but less marked on left side.	4 "	Recovering.

acter. In seven weeks from beginning the treatment he went to work, and during the first week that he was working he gained two and a half pounds, notwithstanding his having previously been given up by a leading Homœopathic physician, and subsequently by an eminent medical professor.

As a medical gentleman in the Academy expressed his skepticism concerning the possibility of the lungs, when once involved, to becoming freed from tubercular deposit, it may be well to say a few words respecting the *modus operandi* of this treatment as regards the removal of tubercular deposit. Dr. Lawson, in regard to this matter, makes the two following propositions: "*To promote the elimination of the tuberculous matter.*" "*To promote the absorption of tubercles.*" (Lawson's Treatise, pp. 448 and 456). And for this purpose he recommends various alterants, as iodine, bromine, alkalies, mercurials, sarsaparilla, etc. And for the removal of inflammatory products (for it will be remembered that according to either Niemeyers' or my own theory, the caseous matter of crude tubercles is the result of inflammation), Dr. Williams recommends these agents, and goes on to state that he "can affirm from much experience in its use, that nitric acid is the best medicine" he knows of for this purpose, supposing it to thus act "by further oxygenating them." (Williams' Principles of Medicine, p. 346). The oxydation of the phosphates has already been considered. (See note at bottom of pages 4 and 9).

Editorial Department.

Periscope.

Absence of Lung.

Dr. W. Dickey reports the following extraordinary case in the *Cincinnati Lancet and Observer*:

Miss L. M. B., æt. sixteen years, of pale complexion and frail constitution; was of consumptive parentage on her father's side; health only moderate from childhood. Eighteen months since her general health began to decline, with an increase of cough, with which she was always afflicted.

She never mentsruated, but monthly phenomena, such as pain in the back, with heavings in the hypogastric region, were evidences that the efforts of nature were at work to establish that function.

Her appetite was always pretty good, but the assimilative powers were poor. No diarrhœa since last August. Had night sweats occasionally for the past eighteen months. During the last few months of her life there was green purulent expectoration; but very little difficulty of breathing at any time. In September, 1868, I was requested by Dr. Pritchet, her attending physician, to examine her lungs by auscultation and percussion. Configuration of chest; general appearance contracted; development of right side equal to that of the left.

Examination: Percussion elicited a dull sound over the entire left lung. Right [left ?] side unusually resonant. Auscultation confirmed the physical sign of extensive tubercular deposits. At this time no special indications of tubercular softening. Subsequently, however, softening took place, as purulent expectoration was a constant symptom. Heart—its position unusual. In place of left side, strong cardiac impulses were heard on the right side; so strong tha its impulses indicated a hypertrophy, or, at least, an aneurismal heart.

Autopsy twelve hours after death. Present, Drs. Pritchet, Cleaveland and myself. On opening the thorax we found the left lung studded with tubercles, principally of the gray character; some, however, were yellow, and in process of softening. Lung in left side somewhat larger than usual, but consisting of two lobes, as ordinary. No lung in the right side; not even a rudiment at the bifurcation. Between the largest of pleura [sic!] the space was clean and beautiful. No lung had ever existed. Heart in the mediastinal space, but in the right side, corresponding to a natural situation in the left. Its walls were thickened and cavities somewhat enlarged.

Remarks: It is to be regretted that a thorough examination was not made. Permission was given to make the examination but a short time before the hour appointed for burial. The malformation consists in but one lung. So far as I know there is not a single instance on record of the kind. The situation of the heart is not to be wondered at. As there was no resistance in the right side, the lung in the left would evidently force its way over to the right side.

Iodide of Potassium in Consumption.

Dr. Balthazar Foster is much in favor of iodide of potassium in some cases of phthisis. He only prescribes it in doses of eight to fifteen grains however, when ether is not tolerated with codliver oil.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, AUGUST 6, 1870.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Society and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

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CAN EVERYBODY PRESCRIBE POISONS?

Such is the question which a daily cotemporary puts at the head of an account of a cancer doctress who a week or so since undertook to ply her avocation on an unfortunate man, who very soon died under her hands. But let the evidence as it appears in the report of the coroner's inquest speak for itself:

Margaret Wiley, of No. 393 East Tenth street, deposed that she was in the habit of curing cancers with a plaster; the composition of the plaster she received from her father; the plaster is composed of arsenic, charcoal, and the yolk of an egg; the quantity of arsenic to each application was about a teaspoonful; the witness told deceased when he applied it to be careful and not get it near the mouth; she told him it was poison, and not to drink any liquor.

George Wiley, husband of the last witness, testified that the deceased called at his house, where Mrs. Wiley prepared a plaster for him, which plaster contained arsenic; the witness obtained a quarter of a pound of arsenic in a lump from a drug store in Third avenue; the man from whom the poison was procured put it in a paper and wrote something on it, but as the witness could not read, he is unable to tell the purport of the writing.

Neither of the precious pair can read or write, but that does not in the least prevent them from "practicing medicine" and dispensing poisons. There is nothing like liberty.

Moreover, was not the American Medical Association, at its last meeting, edified by various shining lights, who maintained that it is superfluous and unnecessary for a physician to know Latin? And as the names of these "villainous drugs" are in Latin in the shops and books, there is not much difference, after all, between Margaret Wiley, cancer doctress, and "the doctor of the future," who is to hold all obsolete tongues in sovereign contempt.

No doubt some bolder reformer will hereafter take a step which will leave even that brilliant Western professor behind, who spoke so slightingly of dead languages; for we may next expect to hear that to read or write any language is a superfluous qualification in a physician.

It is even now, in most States, an unnecessary one, and we are glad that the public begins to think seriously about it. To take out a license and hang out a sign are the only re-

quisites for a practitioner in most of the United States. He or she may then dispense poisons, perform abortions, and undertake any case, all under the immunities and privileges of the profession. A glorious state of things, certainly.

SUN STROKE.

The peculiar symptoms that come under the designation of sun stroke, are brought on by exposure to heat, and are, of course, liable to greater prevalence during the extreme heat of summer. But the rays of the sun are in most cases probably simply an exciting cause of the disease, while over-stimulation from the use of alcoholic beverages and narcotics is, probably in most instances, the predisposing cause.

The following remarks on the subject we find in a late number of the Providence *Journal*, and were contributed to that paper undoubtedly by the widely known, very intelligent and efficient health officer of that city:

The terrible disease popularly called *sun stroke*, or *coup de soleil*, is fearfully prevalent at the present time, and has been for a week or two past, in some of our cities. The names are both misnomers, as the disease does not depend upon the direct effects of the sun. It is caused by excessive heat, and in scientific reports on mortality, the cause of death from this disease is reported as "*Heat.*" The disease is often caused by the heat of the furnace room of a steamboat, of an iron foun. dry, or even of a close attic room in a city boarding house, when there are no direct effects of the sun.

The symptoms of the disease are extremely diverse in their character. Sometimes there *seems to be* intense inflammation and fever, with the face suffused with blood and with great heat and delirium; at other times there is complete prostration with no power to move, but with full vigor of the mental powers. Sometimes there is excessive vomiting, and the symptoms seem to indicate metallic poisoning. We remember to have seen one stalwart Scotchman suffering from heat, tortured (perhaps killed) with tarter emetic under the delusion that he had been poisoned in some way.

It is probable that the principal effects are upon the nervous system and not upon the circulatory system. Even those cases where there is the appearance of intense inflammation and fever, the *character* of the pulse and the actual heat of the system (mostly superficial), prove that the effects are upon the nervous system, and that there is no actual inflammation.

The following vivid report of two cases, from the New York *World*, gives a good idea of a class of cases which are always fatal.

"One man who was brought in—a strong, healthy looking German—breathed from the moment he was placed on the bed like the bellows of a blacksmith's forge. The power of the man's lungs was tremendous, his muscles large and well knit, his complexion indicative of good and wholesome living. He looked like the kind of man it would be hard to kill. Yet he never opened his eyes till the moment before they closed forever. All the doctors could do was of no avail. He was a puzzle to them. If he had shown any symptoms of sinking, like ordinary cases, they could have formed a theory of diagnosis in the matter; but he kept up his high-pressure, locomotive like force to the last, and exploded rather than died out of existence. It was a simple impossibility to determine where his point of vitality was located and in what manner it had been touched by the fatal solar ray."

"A stalwart young Englishman, by way of contrast, went through a series of fits that were agonizing to look upon. He frothed and foamed and struggled and bounded and barked and shrieked until a general doubt was felt as to whether it was not hydrophobia instead of sunstroke from which he was suffering. In his paroxysms it took six able-bodied men to hold him, one of whom—the attending physician—was a Hercules of himself; and after all, it was found absolutely necessary to tie him down. He, too, was unconsious, yet nothing administered to him would stay long enough upon his stomach to produce any salutary effect. At 8 o'clock he wns comatose and not expected to live till midnight."

The treatment of the disease we propose to leave to the doctors. We may express a hope, however, that none of them will make the mistake of treating a case for intense inflammation and fever, where there is really none.

With regard to the persons liable to suffer from this disease, we think there is a general misconception in the community. We have said that the disease is caused by excessive heat. This statement is lacking in one particular which is essential, and a more full and accurate statement would be that the disease is caused by excessive heat acting upon persons unaccustomed to its influence. Persons can become accustomed to live, and do live, in furnace rooms, and other places with a very high temperature, much higher than that of any streets in our cities. They live in these places, with no apparent ill effects, or at least none that are immediate. So, too, persons can become accustomed to the intense heat of our cities, and of our clear midsummer sun, and they do endure them with impunity, *if accustomed to them*. This fact will explain the next statement, to which we would call particular attention. It is, that *nearly* all the cases of sun stroke, so called, especially of the fatal cases, are of foreigners who have not been long in this country. They have not spent a summer here, and have not become accustomed to the excessive, dry heat of our climate. Persons born in this country are sometimes prostrated by heat, from which they soon recover, and they are sometimes killed by excessive draughts of ice water, which produces an entirely different disease from heat. But though we have seen and known a considerable number of cases of sun stroke, we have never known but one fatal case in a person of American birth, and that was a man whose constitution was badly injured by intemperance. We do not say there are no cases among Americans; but we think they are much more rare than is generally supposed, and for the reason we have given, that the people are accustomed to the climate.

This leads us to an observation with which we will close. It is, that the habitual use of ardent spirits predisposes a person to suffer from the effects of heat, and also deprives him of his chances of recovery when so suffering. Ardent spirits add fuel

to the flame, and at the same time destroy the power to withstand it.

The suggestion of Dr. SNOW, that it is a mistake—and a fatal one, too, we may say—to treat a case for intense inflammation and fever, when there is none, is a timely one.

Let it not be forgotten that the nervous centres, rather than the circulatory system are involved, and let the remedies used be in most cases, rather of a soothing and tonic than of a depressing character. We believe that in most cases, at the commencement of the treatment, more reliance is to be placed on the local application of *tepid* than of cold water, the usual resort of the bystanders or friends, and too often of the physician too.

Notes and Comments.

Removal of the Articular Extremity of the Lower Jaw with Restoration of Motion.

Mr. CHRISTOHER HEATH, University College Hospital, London, and Dr. J. E. GARRETSON, of this city, both record cases of the removal of the articular extremity of the lower jaw with complete restoration of motion after a few months. In Mr. Heath's case the condyle was removed on the 16th of June, 1869, and in December the movements are reported to be as perfect as though no disease existed.

In Dr. Garretson's case the full left half of the bone was removed in January, 1866. The case was lost sight of about one month after the operation, and seen two years later, when motion was found perfect. Both operations were for necrosis.

Marshall Infirmary, Troy, N. Y.

At an annual meeting of the Governors of the Marshall Infirmary, Troy, held July 25th, officers of the Board were elected for the ensuing year.

Drs. Thorn and Wotkyns presented their resignations as attending physicians of the institution on account of continued ill health, and in accordance with a new regulation of the Board, Dr. Wotkyns was elected consulting physician of the medical board. Dr. Thorn declined this honor, but retained his position as one of the Governors of the Infirmary. Both of these gentlemen have been long connected with the institution, and have discharged their duties with ability. Dr. Thorn had recently presented the Infirmary with a very extensive library. The Board of Governors adopted a series of resolutions expressing their thanks. Drs. Whiton and Ward of Troy, were re-elected as attending physicians. Dr. C. L. Hubbell, of Troy, and Dr. George H. Hubbard of Lansingburg, were chosen to fill the vacancies caused by the resignations of Dr. Thorn and Dr. Wotkyns. They are both gentlemen of long established reputation and of the most extensive practice. The present board of attending physicians consists of Dr. Hubbard of Lansingburg, and Drs. Hubbell, Whiton and Ward of Troy. The following is an extract from the report presented by Mr. Coleman from the Committee of Management:

No of patients admitted during quarter	91
Viz.: Into the sick department	75
" " insane "	19
Whole No. discharged	67
Viz.: From the sick, cured	36
" " " improved	11
" " " unimproved	7
" " " dead	5
" " insane, cured	4
" " " unimproved	2
" " " dead	2
Present No. of patients	160
Viz.: In the sick department	45
" " insane department	115

Correspondence.

DOMESTIC.

Report of a Coroner's Inquest.

EDS. MED. AND SURG. REPORTER:

The following statement of an investigation before a coroner and jury, is presented for publication in your widely circulated journal, believing that it contains points of practical value, and material for deep, if not painful, reflection. On the main thoroughfare of Hoboken, N. J., stands a well-gotten up drug store, attended by its proprietor. At the hour of midnight, on the 30th day of June, 1870, a former clerk and partner entered the store, and after a few words had passed between himself and the proprietor (his old partner), became excited, passed behind the counter, took from the shelf a bottle of tinct. opium, and drank from the bottle an undetermined quantity, exclaiming, "You will never see me again." The proprietor, having full knowledge of what he had taken, immediately ordered his clerk to prepare the following mixture: Tart. antim., gr. viij, pulv. ipecac., gr. xx, aqua, f℥ij, to be given in one dose. In half an hour vomiting ensued. From this time until 5 o'clock A. M. he paced the floor and was conscious; at this hour he fell asleep; slept half an hour, then awoke only to fall quickly into a heavy slumber. At half past six o'clock, A. M., the first summons for a physician was made. He saw the patient and ordered given one-third of a grain of atropia subcutaneously, which seemed to afford temporary relief. The physician then left, stating that engagements demanded his presence elsewhere; that he would return in four or five hours, and should the exigencies of the patient demand it, to summon another physician. In a few minutes the patient was evidently sinking so fast that the proprietor sent for physician No. 2. He ordered vinegar and iced water to be given per anum; also cloths applied to the extremities, satura-

ted with boiling water. This last prescription produced no apparent benefit. Physician No. 1 called again, and ordered to be given, subcutaneously, two-thirds of a grain of atropia.

The patient quickly died at eleven o'clock, which event rendered further attempts at restoration useless. Thus ended the first act of this mysterious and interesting case. We will now enter upon the stage of investigation, conducted by a coroner and twelve jurors, each sworn upon his oath to make diligent inquiry as to the manner and cause of death. The number of witnesses who testified were three. The first was the brother of deceased, who had not seen deceased alive since last February, and knew nothing of the facts. The second witness was the proprietor and former partner, from whom the *few* facts *given* were elicited. The third witness was the doctor who made the post-mortem examination of the body, and had never seen the deceased during life. He stated that the post-mortem symptoms were those which usually attend upon death from poisoning with opium. The stomach contained about eight ounces of dark,thick fluid, which emitted a strong odor of mustard and opium. The coroner asked the doctor what plan of treatment he would recommend in similar cases. The doctor replied: "In all cases of suspected or positive poisoning by opium I would, if called immediately, endeavor to dislodge the poison by the use of sulphate of zinc or copper, as they are speedy and safe emitics. I would then further attempt to neutralize the deleterious effects of the opium by the judicious use of tinct. belladonna. This drug possess es antidota properties of great power, and its reliability andl success are well established. Had the patient have had the timely and judicious use of this remedy, he would probably have recovered." This ended the testimony.

The coroner, in delivering his charge to the jury, said: "I have no doubt but what this is a case of suicide, yet it is proper for you to consider whether those having the deceased in charge before death were not guilty of neglect in not calling medical aid in time."

The foreman then said, "Gentlemen, I do not see any necessity for retiring for consultation, I think it is a case of suicide, and blame should not rest upon any one." To which opinion two or three said, "Yes," the others consented if silence may be so construed. So ended this *diligent* inquiry, as to the manner and means of the death of a man taken at *midnight*. I will now end this case by asking the readers of the REPORTER the following questions:

1*st*. Was the proprietor of this store, who is not a physician, justified in attempting to treat a patient so desperately situated for six hours, *alone*, when he could have, in fifteen minutes, called in the aid of one or more experienced physicians?

2*d*. Was the treatment which he adopted (if he did adopt it,) the best for a druggist to use or recommend in the absence of a physician?

3*d*. What were the symptoms which indicated ice-water and vinegar per rectum, and boiling water upon the extremities, and what were the reasonable expectations of success in such a plan of treatment?

4*th*. Why were not the proprietor's clerk who prepared the remedies, and the two physicians who treated him, called before the jury to testify? Of the many who must have seen the deceased in his last hours of peril, not one witness appears except the proprietor of this store, who was treating his recent partner during his hours of consciousness.

5*th*. What were the words spoken at midnight between the two, that should have caused him to seek death? *Before the jury* not a tongue disclosed it.

6*th*. Did the jury decently observe the sacredness of their oaths in the manner in which they investigated this case? L. W. ELDER, M. D.

Hoboken, N. J., July 6, 1870.

Elongated Uvula.

EDS. MED. AND SURG. REPORTER:

I send you the following case: Patient æt. 40 years; an auctioneer. Consulted me on account of what he called "consumption." I asked him how he knew it was consumption. His answer was, "That's what the *doctors* tell me." I inquired into the symptoms as minutely and thoroughly as my knowledge would permit, but found nothing that indicated consumption but a dreadful cough, though not by any means a consumptive cough. Auscultation revealed some bronchial irritation, percussion, clear both anteriorly and posteriorly. An examination of the mouth and larynx revealed what I believed to be the sole cause, viz: elongated and hypertrophied uvula. I told my patient that I thought his "consumption" was curable, and informed him of the exciting cause and medical treatment for the same. With the aid of an assistant I removed the redundant part of the uvula; ordered a mild astringent gargle, to be used several days, at the same time requesting him to report in a week. To his surprise and great joy the bronchial irritation subsided in a few days; the cough ceased; the general health improved, and in reality his "consumption" was cured.

I report this case not for the magnitude of the operation, or rarity of the disease, but to show how important it is, in every case that comes under our notice, to make a thorough examination—take nothing for granted, believe nothing your patients tell you unless you prove it.

This gentleman had suffered for years, had spent much money, first and last, had taken bottle after bottle of medicine, besides living a miserable life, thinking, sooner or later, he must fill a consumptive's grave; all for a want of a thorough investigation and knowledge of the true exciting cause.

Smyrna, Del. S. L. WEST, M. D.

News and Miscellany.

The Arsenic Eaters of Styria.

Men of science who traversed Styria have long reported the fact that there were people in Styria who consumed arsenic. However, this statement was denied by others, who affirmed that the white mineral they ate was nothing but chalk.

Prompted by the importance of this subject, the royal medical counsel, Dr. Von Vest, occasioned the issue of a circular to the physicians of Styria, requesting them to communicate their experiences with regard thereto. Seventeen reports were obtained, from which the following is an extract:

The principal seat of the arsenic eaters—according to these—is in the northern and northwestern part; the southern part, however, is free from them. The district of Hartberg, in the former, counts not less than forty individuals who indulge in that habit. From the various sorts of arsenic, the white arsenic, or ratsbane, is mostly taken; less so the commercial yellow, and still less the natural red arsenic, or orpiment. The arsenic eaters begin with a dose the size of a millet, and increase this quantity gradually to the dose of the size of a pea, the weight of these quantities being 0.22, 0.56, and 0.62 grains avoirdupois, respectively.

These doses are either taken daily, or every other day, or only once or twice a week. In the district of Hartberg the custom prevails to suspend this unwise usage at the time of the new moon, to commence at the time when she is on her increase with the relative smallest dose, and to increase with it to the time of the full moon. From this period the quantity is diminished, but aloes are taken in increased doses till strong diarrhœa is produced. Directly after the administering of arsenic, most people abstain from drinking, and with regard to aliment, some prefer pastry to meat, while others abstain from the taking of fat. However, the majority will take all kinds of food, indulging also considerably in the use of alcoholic beverages. Older persons who have been accustomed to that habit from their boyhood feel a sensation of warmth in their stomach shortly after taking the poison, complaining only of dizziness in the head after excessive use.

The ratsbane eaters belong mostly to the lower classes—wood cleavers, stable grooms, charcoal burners, and wood warts. They fall into that habit at the early age of fifteen, and continue it until the ages of seventy and seventy-six. Although the female sex is not averse to it, the majority belong to the male sex. They are generally strong and healthy persons, courageous, pugnacious, and of strong sexual dispositions. The reason of this habit is very probably attributable to the fact of its apparent favorable action upon horses. If requested to explain the reason of their indulging in it, they will say that it is to make them strong and healthy.

Obituary.

DR. A. B. DAYTON.

At his residence in Matawan, July 19th, after a short illness, Dr. A. B. Dayton, aged 57 years.

It is with sincere regret that we record the death of Dr. A. B. Dayton, of Matawan, N. J. He held a prominent position among the profession of New Jersey, and was a man of great personal and professional worth. From an obituary notice of him, by Dr. F. K. Travers, his partner in practice, published in a Matawan paper, we extract the following:

Dr. Dayton was a brother of the late lamented Wm. L. Dayton, and of Jas. B Dayton, Esq., of Camden. He was born at Baskingridge, Somerset co., N. J., on December 25, 1812. He entered Princeton College at an early age, with the expectation of graduating at that time-honored institution; but whilst in the Sophomore class his health failed him, and he was compelled to relinquish this cherished object. He was, however, a fine scholar, and very proficient in the ancient languages.

Soon after leaving the College of New Jersey he commenced the study of Medicine, and graduated at the College of Physicians and Surgeons, New York city, in the Spring of 1835. After practicing at Chester, Morris co., N. J. a few months, he removed to Matawan—then known as Middletown Point—in July, 1835, where he has since devoted his entire life to the active practice of his profession.

Few men in the medical profession have done more real hard work than did Dr. Dayton. During a residence of 35 years in this community he was hardly ever absent from his post of duty, but labored with untiring zeal in the cause of suffering humanity. Day and night, in fair weather and in foul, he was ever ready to do his duty. To "relieve the distressed" seemed the chiefest object of his life. Even when declining health compelled him to take a partner to assist him in the duty of his extensive practice, he could not be persuaded to rest, but would remark that he never felt so well as when in his wagon visiting his patients. He visited patients as late as Sunday evening the 17th, and attended church twice on that day. His death has cast a gloom over our whole community and sorrow is depicted on every countenance.

MARRIED.

Henry—Hastings. July 26, by the Rev. J. Livingston Reese, of St. Paul's Church, Albany, Dr. Morris H. Henry, and Elizabeth Root, daughter of Hugh J. Hastings, both of New York.

McCleery—McCormick. July 2nd, by the Rev S. P. Heron, assisted by the Rev S. L. Finney, of Princeton, N. J., J. P. McCleery, M. D., and Miss Margaret McCormick, both of Milton, Pa.

McConkey—Pringle. By Rev. Samuel Willson (grandfather to the bride), assisted by the Rev. W. V. Milligan—June 23, at the house of Dr. G. W. Pringle, New Concord, O., Rev. W. J. McConkey, and Miss Hettie H. Pringle, both of Muskingum co., O.

Reynolds—Smith. At the M. E. Parsonage, in Hampton, N. H., July 13, by Rev. G. W. Ruland, Thos. O. Reynolds, M. D., of Kingston, N. H., and Miss M. Fannie Smith, of Raymond, N. H.

Seward—Kimber. At the residence of the bride's mother, in this city, June 14th, 1870, by the Rev. S. S. Seward, of North Bridgewater, Mass., Dr. John L. Seward, of South Orange, N. J., and Miss Lidie A. Kimber.

DIED.

Halsted.—In New York, July 26th, Thaddeus M. Halsted, M. D., in the 55th year of his age.

Manter.—In Wellfleet, Mass., July 7, 1870, Dr. Geo W. Manter, in the 47th year of his age.

Scott.—In New York, July 26th, Ann Jane, wife of Dr. Wm. H. Scott, in the 78th year of her age.

Shoemaker.—In this city, July 27th, Maria, wife of Dr. Charles Shoemaker, in the 68th year of her age.

Sweet.—In New Bedford, Mass., July 25th, Dr. Wm Sweet, son of the late Dr. Jonathan P. Sweet, aged 22 years.

Wallace.—In Pittsburg, July 25th, John Howard, youngest son of Dr. M. W. and Eliza L. Wallace, aged 3 years, 1 month and 20 days.